

Remarks

Rejections under 35 U.S.C. § 112

The Examiner has rejected claims 1 – 16 as being indefinite. The Examiner asserts that claim 1 is vague and indefinite in that it is unclear how promoters that are regulable by a repressor can be considered “constitutive”. In order to more clearly describe the invention claims 1 and 11 have been amended to remove the term “constitutive” and to indicate that transcription from the promoter is active in the absence of a repressor, which is the meaning to be given to the term “constitutive” in light of the specification.

As described on p. 2, lines 15 – 19, the bistable genetic toggle switch of the invention comprises two regulatory genes R1 and R2 under control of promoters P1 and P2, wherein the expression of one regulatory gene influences the expression of the other regulatory gene. When present, the product of the first regulatory gene acts as a repressor to repress expression of the second regulatory gene. Similarly, when present, the product of the second regulatory gene acts as a repressor to repress expression of the first regulatory gene. As further described on p. 2, lines 28 through p. 3, line 1, this results in two stable expression states. In the first state, transcription from the first promoter is active and transcription from the second promoter is inactive because of the presence of the product of the first regulatory gene. In the second state, transcription from the second promoter is active and transcription from the first promoter is inactive because of the presence of the product of the second regulatory gene. As the foregoing description indicates, the term “constitutive promoter” is used to indicate that the promoter is active in the absence of a repressor. Applicants submit that replacing the term “constitutive” with its meaning in light of the specification renders the claims definite.

The Examiner has asserted that claim 10 is vague and indefinite in that the metes and bounds of the term “disposed within” are unclear. As suggested by the Examiner, the term “disposed within” has been replaced by the term “comprised within”, which is intended to have similar scope.

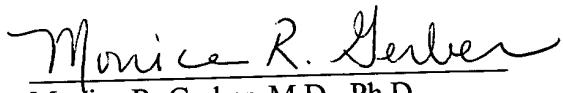
The specification has been amended to refer to co-pending applications by serial number rather than attorney docket number.

In light of the foregoing Amendment and Remarks, Applicants respectfully submit that the present case is in condition for allowance. A Notice to that effect is respectfully requested.

If, at any time, it appears that a phone discussion would be helpful or if questions arise regarding the amendment proposed above, please do not hesitate to contact the undersigned at (617) 248-5071.

Please charge any fees associated with this filing, or apply any credits, to our Deposit Account No. 03-1721.

Respectfully submitted,


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